



United States
Department of
Agriculture

Forest
Service

Fishlake National Forest
Beaver Ranger District
Fax (435) 438-1242

575 South Main, PO Box E
Beaver, UT 84713
Phone (435) 438-2436

File Code: 2810

5/031/003

Date: September 7, 2000

Dan Proctor
951 East 830 South
Pleasant Grove, Utah 84062

Dear Dan:

I have approved and enclosed the new Plan of Operations for the Deer Trail Mine. It replaces the previous Plan of Operations and amendments, which have been terminated by mutual agreement. The new Plan involves only minor changes, it allows for a portable crusher to be used, with essentially no increase in the area to be used at the PTH tunnel area. I have reviewed the existing bond and have found that the amount is satisfactory to cover the activities and surface use described in the new Plan.

Installation of a heavy media separator as described in your submission of May 31, 2000 would require more extensive environmental analysis and, ultimately, approval of an amendment to the new Plan. During a recent conversation, you indicated that you might plan on installing the HMS on private land near the mine. However, if UNICO decides to proceed with plans to install an HMS at the Deer Trail mine, please notify us and we will begin the evaluation and analysis process. If that occurs I would also expect UNICO to submit a modified mining and milling scenario that would describe the added waste and ore production. If approved, the bond for the project would be increased to reflect the new surface facilities and reclamation needs.

As mentioned in your meeting with Steve Winslow, Tom Buchta, and Tom Abbay, a proposal to install an HMS would also require that you submit information on the geochemistry of the waste rock, including the characterization of the chemical nature of any mill tailings that might be placed back in the mine. Tom Buchta has provided some guidance on the sampling, testing and reporting for the chemical analysis, which I have enclosed for your consideration (Enclosure 1). He also provided some references on evaluating "acid production potential" and "meteoric water mobility" of ore and waste rock and I have included these for your information.

Please contact Steve or me if you have any questions.

Sincerely,

DAYLE R. FLANIGAN

District Ranger

Enclosure (4)

Cc: Lynn Kunzler; State Division of Oil, Gas and Mining

RECEIVED

SEP 11 2000

DIVISION OF
OIL, GAS AND MINING



**PLAN OF OPERATIONS FOR MINING ACTIVITIES
ON NATIONAL FOREST SYSTEM LANDS**

Submitted by: _____

Signature	Title	Date
Plan Received by: <u>Steve Winkler</u>	<u>Minerals Administrator</u>	<u>7/10/00</u>
Signature	Title	Date

I. GENERAL INFORMATION

- A. Name of Mine/Project: Deer Trail Mine
- B. Type of Operation: Lode/Exploration/Development/Underground
(lode, placer, mill, exploration, development, production, other)
- C. Is this a (new/**continuing**) operation? (circle one). If continuing a previous operation, this plan (**replaces**/modifies/supplements) a previous plan of operations. (circle one)
- D. Proposed start-up date of operation: July 3, 2000
- E. Expected total duration of this operation: +5 years
- F. If seasonal, expected date of annual reclamation/stabilization close out: N/A
- G. Expected date for completion of all required reclamation: To be determined.

II. PRINCIPALS

- A. Name, address and phone number of operator: UNICO INC., P.O. Box 777, Magalia, Calif. 95954, 530-873-3494
- B. Name, address, and phone number of authorized field representative (if other than the operator). Attach authorization to act on behalf of operator. W. Dan Proctor, 951 East 830 South, Pleasant Grove, Utah 84062, 801-785-1115 (Confirm authorization from Ray Brown @530-873-4394)
- C. Name, address and phone number of owners of the claims (if different than the operator): FEHRPROP INC. 12900 Preston Rd., Suite 1112 LB6, Dallas, Texas 75230 214-386-7999

(If more space is needed to fill out a block of information, use additional sheets and attach to form)

- D. Name, address and phone number of any other lessees, assigns, agents, etc., and briefly describe their involvement with the operation, if applicable:
N/A

III. PROPERTY OR AREA

Name of claim, if applicable, and the legal land description where the operation will be located.

MC#	Name	Section	Township	Range
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See attached sheet for the listing of claims covering the proposed operation site.

*Note: Most of the claims are listed because they cover access roads not because of any planned surface excavations.

IV. DESCRIPTION OF THE OPERATION

- A. **Access.** Show on a map (USGS quadrangle map or a National Forest map, for example) the claim boundaries, if applicable, and all access needs such as roads and trails, on and off the claim. Specify which Forest Service roads will be used, where maintenance or reconstruction is proposed, and where new construction is necessary. For new construction, include construction specifications such as widths, grades, etc., location and size of culverts, describe maintenance plans, and the type and size of vehicles and equipment that will use the access routes.

The operation will use of portions of Forest Service roads 125 and 126 as located in Sections 12 and 13, T. 28 S., R. 4W. These roads currently require no additional construction activity. Any maintenance would be for the purpose of keeping the area in a state of good repair. The roads will be used by light trucks up to one-ton size and a 10-wheeled dump truck.

- B. **Map, Sketch or Drawing.** Show location and layout of the area of operation. Identify any streams, creeks or springs if known. Show the size and kind of all surface disturbances such as trenches, pits, settling ponds, stream channels and run-off diversions, waste dumps, drill pads, timber disposal or clearance, etc. Include sizes, capacities, acreage, amounts, locations, materials involved, etc.

Please note attached sketch of mine layout (buildings and other support structures) and waste dump. All structures and power lines are required for the projected exploration/mining project. There are no known springs on the listed claims. Also, no streams or ponds.

(If more space is needed to fill out a block of information, use additional sheets and attach to form.)

- C. **Project Description.** Describe all aspects of the operation including mining, milling, and exploration methods, materials, equipment, workforce, construction and operation schedule, power requirements, how clearing will be accomplished, topsoil stockpiled, waste rock

placement, tailings disposal, proposed number of drill holes and depth, depth of proposed suction dredging, and how gravels will be replaced, etc. Calculate production rates of ore. Include justification and calculations for settling pond capacities, and the size of runoff diversion channels.

Exploration, development, and production work will be done at the mine site. Underground access will be the PTH Tunnel (lower mine area, on located mining claims), No. 2 and No. 3 tunnels (upper mine area, patented mining claims), and others yet to be determined. A small screening plant and crusher is contemplated to be used at the upper patented area. To be used in conjunction with conventional gravity operation concentrating equipment, i.e., "Wiffley Table" gold bowl, and spirals.

A portable crushing plant will be set in place at the ore dump. The crushing plant will consist of a portable Cedar Rapids crushing unit, complete with jaw crusher, screen deck, roll crusher, and conveyors. The crusher is expected to crush up to 500 tons per day of mine run material. The crushing plant will produce $\frac{3}{4}$ to $\frac{1}{4}$ inch and $\frac{1}{4}$ inch minus material. High grade ore from the 8600 ore body will be processed during this phase of the project. Little waste rock is expected to be produced; what would be produced would be placed on the existing waste rock dump. No more than 2,000 tons of waste rock is expected to be produced per year. All ores will be shipped off the property for further refinement and settlement. A wood or concrete retaining wall (dimensions: 8'x30'x12') will be constructed around the existing ore dump area to prevent sloughing and mixing of the waste rock dump with the ore to be crushed and hauled off-site. A concrete pad (dimensions: 16'x16') will be constructed to provide a base for a heavy media separator, which will be proposed in a future amendment to this plan and installed in the next phase of this project, if approved.

A small work force of no more than 10 people will be required.

The present buildings and facilities are needed for the operation and will be utilized for shops, storage, office, equipment and stationary compressor housing. No other buildings are contemplated at the present time. All scrap metal will be placed in a secured location on the premises until such time that it can be removed and sold for salvage, including the old air receiving tank located at the upper mine area. The old "out house" west of the PTH portal will be removed and that area reclaimed.

Some water will be needed for shower facilities, septic system, mining purposes, and dust control measures. Also, at the upper patented area water will be required for use with the gravity concentration equipment and dust control as well. It is proposed that the water will come from the Three Mile Canyon spring via the Forest Service pipeline (if approved). The exact amount of water needed for the operation has not been calculated at present. However, consumption should be less than 15,000 gallons per week. A recycled water pond will be constructed and utilized in conjunction with the concentrating equipment at the upper patented mine area. This is to conserve on the amount of water taken from the pipeline source. Tailings from this operation will be placed in a proposed new tailing and settling pond on the existing location of the old mill tails. The new tails will be covered with the soil excavated from the new pond at the end of operations. This soil will be stockpiled at that location. No surface drilling is planned at the present time. However, in the event surface drilling becomes necessary all permits will be obtained prior to drilling.

(If more space is needed to fill out a block of information, use additional sheets and attach to form.)

- D. **Equipment and Vehicles.** Describe that which is proposed for use in your operation (Examples: drill, dozer, wash plant, mill, etc.). Include: sizes, capacity, frequency of use, etc.

The existing stationary diesel compressors, mine cars, and trammer motor (electric); one small one-ton water truck; two dump trucks, one 4x4 vehicle, 2 front-end loaders; one screening plant and portable crushing unit (see page 3).

- E. **Structures.** Include information about fixed or portable structures or facilities planned for the operation. Show locations on the map. Include such things as living quarters, storage sheds, mill buildings, thickener tanks, fuel storage, powder magazines, pipelines, water diversions, trailers, sanitation facilities including sewage disposal, etc. Include engineering design and geotechnical information for project facilities, justification and calculations for sizing of tanks, pipelines and water diversions, etc.

See the attached sheet for building locations and uses.

V. ENVIRONMENTAL PROTECTION MEASURES (SEE 36 CFR 228.8)

- A. **Air Quality.** Describe measures proposed to minimize impacts on air quality such as obtaining a burning permit for slash disposal or dust abatement on roads.

Necessary permits will be obtained before burning. Road travel will be minimal; but, when necessary, the water truck will sprinkle used roadways and other work areas for dust abatement.

(If more space is needed to fill out a block of information, use additional sheets and attach to form.)

B. **Water Quality.** State how applicable state and federal water quality standards will be met. Describe measures or management practices to be used to minimize water quality impacts and meet applicable standards.

1. State whether water is to be used in the operation, and describe the quantity, source, methods and design of diversions, storage, use, disposal, and treatment facilities. Include assumptions for sizing water conveyance or storage facilities
2. Describe methods to control erosion and surface water runoff from all disturbed areas, including waste and tailings dumps.
3. Describe proposed surface water and groundwater quality monitoring, if required, to demonstrate compliance with federal or state water quality standards.
4. Describe the measures to be used to minimize potential water quality impacts during seasonal closures, or for a temporary cessation of operations.
5. If land application is proposed for wastewater disposal, the location and operation of the land application system must be described. Also describe how vegetation, soil, and surface and groundwater quality will be protected if land application is used.

1. Water will be used for drilling, compressor coolant, and personal hygiene.
2. Waste rock and tailings dumps are stabilized and contained.
3. No surface water, springs, or other underground water is found on the subject lands.
4. Any contemplated ponds will be properly lined.
5. N/A

C. **Solid Wastes.** Describe the quantity and the physical and chemical characteristics of solid waste produced by the operation. Describe how the wastes will be disposed of including location and design of facilities, or treated so as to minimize adverse impacts.

No solid wastes will be produced. Chemical wastes will consist mainly of used motor oil and lubricants that will be disposed according to State and/or Federal requirements.

D. **Scenic Values.** Describe protection of scenic values such as screening, slash disposal, or timely reclamation.

Allowing natural vegetation to grow, reseeding where advisable. When the operation finally concludes then contouring of mine dumps and final re-seeding will take place.

(If more space is needed to fill out a block of information, use additional sheets and attach to form.)

- E. **Fish and Wildlife.** Describe measures to maintain and protect fisheries and wildlife, and their habitat (includes threatened, endangered, and sensitive species) affected by the operations.

The operation will not involve any additional surface disturbances and will not impact, in an adverse way, fisheries, wildlife, or their habitat.

- F. **Cultural Resources.** Describe measures for protecting known historic and archeological values, or new sites in the project area.

There are no known cultural resources in the mining area or the waste dump location. Forest Service will be notified in the event that cultural resources are found or suspected.

G. **Hazardous Substances.**

1. Identify the type and volume of all hazardous materials and toxic substances that will be used or generated in the operations including cyanide, solvents, petroleum products, mill, process and laboratory reagents.

The only hazardous or toxic substances that will be used will be those required for a normal mining program including gasoline, lubricating and engine oils, and diesel fuel. Such materials will be used from their original containers (5 gallon or 50 gallon drums). The number of 5 gallon and 50 gallon containers will not likely exceed ten (10) at any one time. These materials will be in a locked building or locked security fence.

2. For each material or substance, describe the methods, volume, and frequency of transport (include type of containers and vehicles), procedures for use of materials or substances, methods, volume, and containers for disposal of materials and substances, security (fencing), identification (signing/labeling), or other special operations requirements necessary to conduct the proposed operations.

These materials will be brought on site by suppliers truck transports, as needed, and used on site. Disposal will be to the appropriate county landfill or collection facility. There is no plan to have an on-site disposal facility.

(If more space is needed to fill out a block of information, use additional sheets and attach to form.)

3. Describe the measures to be taken for release of a reportable quantity of a hazardous material or the release of a toxic substance. This includes plans for spill prevention, containment, notification, and cleanup.

The relatively small quantity of material that will be on site at any one time will be secured within a lock secured building and/or fenced/locked enclosure. Such storage area will be protected by a soil berm. Any reportable spill will be immediately reported to the proper agencies and cleanup will immediately follow.

- H. **Reclamation.** Describe the annual and final reclamation standards based on the anticipated schedule for construction, operations, and project closure. Include such items as the removal of structures and facilities including bridges and culverts, a revegetation plan, permanent containment of mine tailings, waste, or sludges which pose a threat of a release into the environment, closing ponds and eliminating standing water, a final surface shaping plan, and post operations monitoring and maintenance plans.

The plan is for a year-round operation. Annual reclamation will be done as necessary. Refer to attached "Reclamation Plan" that contains the reclamation actions and standards that UNICO will follow.

VI. FOREST SERVICE EVALUATION OF PLAN OF OPERATIONS

- A. Required changes/modifications/special mitigation for plan of operations:

See attached sheet "VI."

(If more space is needed to fill out a block of information, use additional sheets and attach to form.)

- B. **Bond.** Reclamation of all disturbances connected with this plan of operations is covered by Reclamation Performance Bond Nos. 040803971 and 040803971a, dated 3/24/97 and 7/21/97, signed by Ray Brown, President, UNICO, Inc. (Principal) and N/A (Surety), for the penal sum of \$20,100. This Reclamation Performance Bond is a guarantee of faithful performance with the terms and conditions listed below, and with the reclamation requirements agreed upon in the plan of operations. This Reclamation Performance Bond also extends to and includes any unauthorized activities conducted in connection with this operation.

The bond amount for this Reclamation Performance Bond was based on a bond calculation worksheet. The bond amount may be adjusted during the term of this proposed plan of operations in response to changes in the operations or to changes in the economy. Both the Reclamation Performance Bond and the bond calculation worksheet are attached to and made part of this plan of operations.

Acceptable bond securities (subject to change) include:

1. Negotiable Treasury bills and notes which are unconditionally guaranteed as to both principle and interest in an amount equal at their par value to the penal sum of the bond; or
2. Certified or cashier's check, bank draft, Post Office money order, cash, assigned certificate of deposit, assigned savings account, blanket bond, or an irrevocable letter of credit equal to the penal sum of the bond.

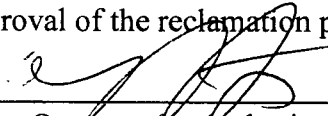
VII. TERMS AND CONDITIONS

- A. If a bond is required, it must be furnished before approval of the plan of operations.
- B. Information provided with this plan marked confidential will be treated in accordance with the agency's laws, rules, and regulations.
- C. Approval of this plan does not constitute certification of ownership to any person named herein and/or recognition of the validity of any mining claim named herein.
- D. Approval of this plan does not relieve me of my responsibility to comply with other applicable state or federal laws, rules, or regulations.
- E. If previously undiscovered cultural resources (historic or prehistoric objects, artifacts, or sites) are exposed as a result of operations, those operations will not proceed until notification is received from the Authorized Officer that provisions for mitigating unforeseen impacts as required by 36 CFR 228.4(e) and 36 CFR 800 have been complied with.
- F. This plan of operations has been approved for a period of 2 years or until December 31, 2002. A new or revised plan must be submitted in accordance with 36 CFR part 228, subpart A, if operations are to be continued after that time period.

VIII. OPERATING PLAN ACCEPTANCE

VIII. OPERATING PLAN ACCEPTANCE

I/We have reviewed and agreed to comply with all conditions in this plan of operations including the required changes, modifications, special mitigation, and reclamation requirements. I/We understand that the bond will not be released until the Authorized Officer in charge gives written approval of the reclamation plan.



Operator (or Authorized Representative)

10 July 2000

(Date)

IX. OPERATING PLAN APPROVAL

Dayle R. Flanagan

(Name)

DISTRICT RANGER

(Title)

DAYLE R FLANAGAN

(Authorized Officer)

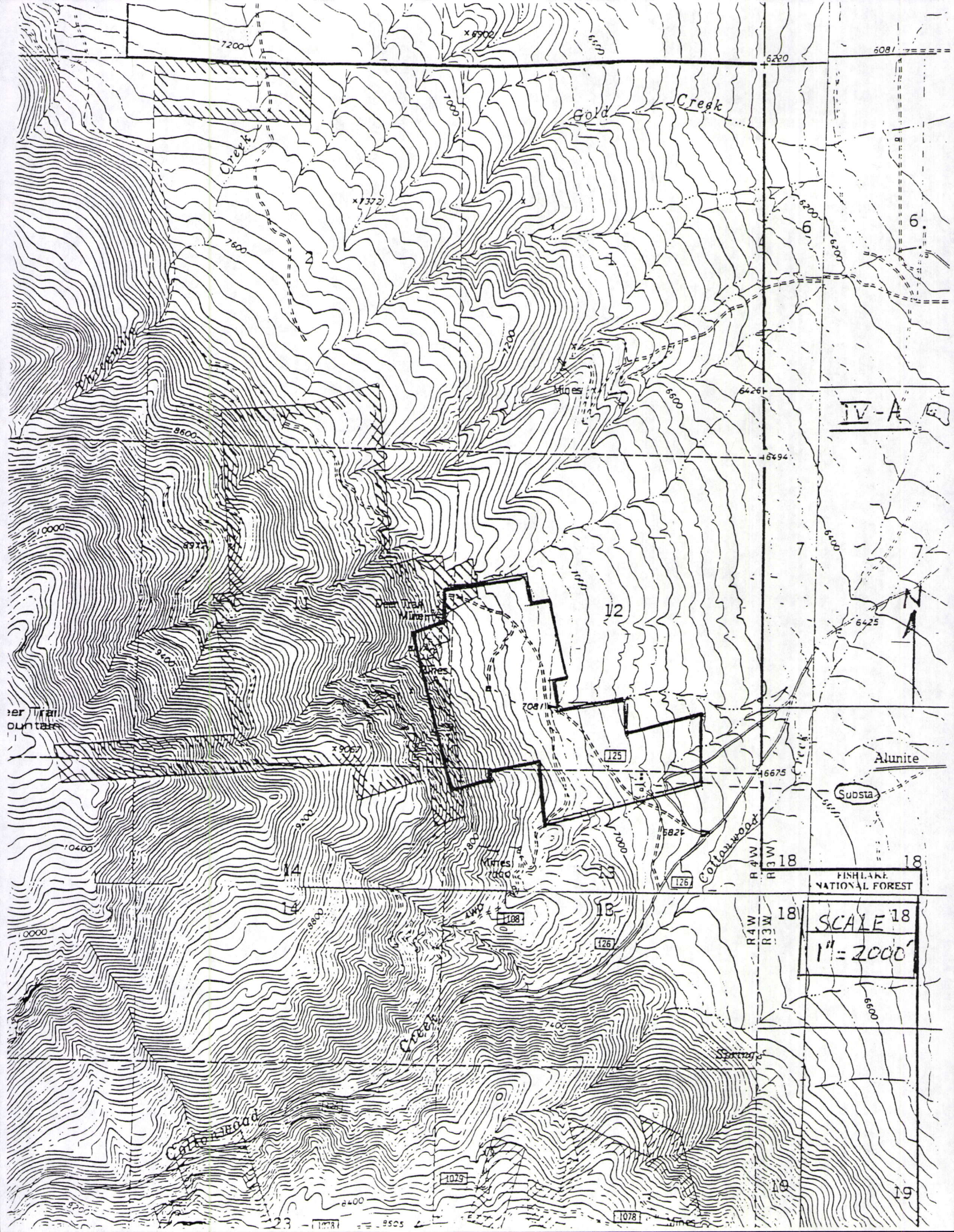
9/7/2000

(Date)

VI. FOREST SERVICE EVALUATION OF PLAN OF OPERATIONS

A. Required changes/modifications/special mitigation for plan of operations:

1. The operator may dispose of up to 2,000 tons of waste rock along the south and southeast sides of the existing waste dump. Rock will be dumped over the rim and allowed to settle at its angle of repose to the toe of the dump. Additional waste rock disposal will be evaluated and approved as necessary by the Forest Service.
2. The operator will not excavate or disturb the waste dump area other than by the dumping mentioned above, unless authorized by the Forest Service.
3. At final reclamation, any piles of waste rock or berms on top of the dump will be bladed and pushed over the edge of the dump to provide as uniform a surface as possible.
4. No new buildings or other facilities are authorized in this phase of the mining operation.
5. Approval of this plan by the Forest Service does not authorize the use of water for mining purposes. Use of water for the operation will require a water right approved by the Utah State Engineer.
6. Approval of this Plan by the Forest Service does not authorize mining activities on lands other than National Forest System lands. All proposals for uses on non-NFS land mentioned in this Plan must be reviewed and approved by the Utah State Division of Oil, Gas and Mining.



IV-A

FISHLAKE
NATIONAL FOREST
SCALE 18
1" = 2000'

ITEM III - PROPERTY OF AREA

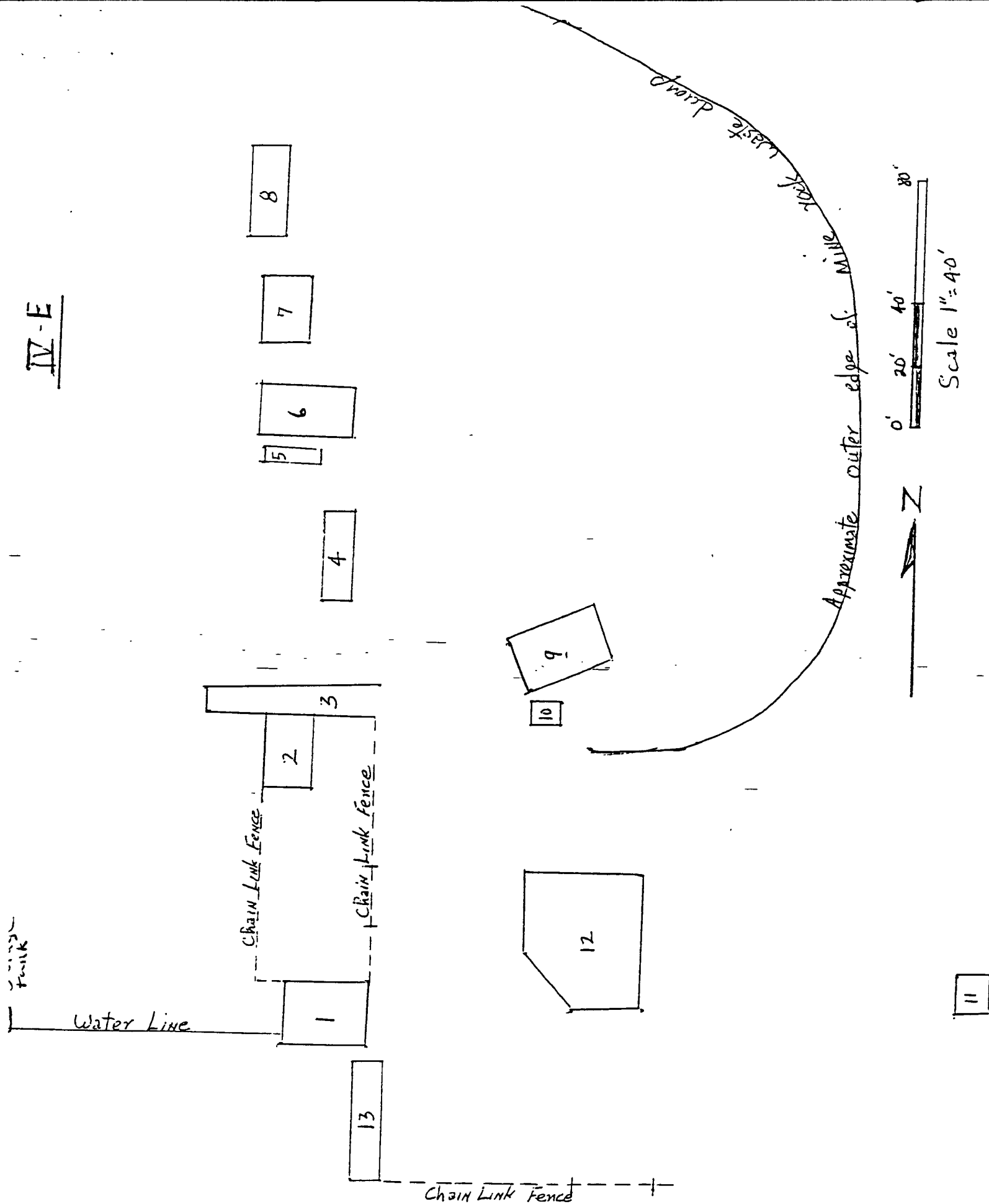
<u>MC#</u>	<u>CLAIM NAME</u>	<u>SECTION</u>	<u>TOWNSHIP</u>	<u>RANGE</u>
95750	Portal No. 1	S.E. 1/4, Section 12, Township 28 South, Range 4 West		
95751	Portal No. 2	N.E. 1/4, Section 13, Township 28 South, Range 4 West S.E. 1/4, Section 12, Township 28 South, Range 4 West		
95731	Red Knoll	N.E. 1/4, Section 13, Township 28 South, Range 4 West S.E. 1/4, Section 12, Township 28 South, Range 4 West		
95697	Gorge	N.E. 1/4, Section 13, Township 28 South, Range 4 West		
95610	Crest	S.E. 1/4, Section 12, Township 28 South, Range 4 West S.W. 1/4, Section 12, Township 28 South, Range 4 West		
95600	Cliff No. 1	S.W. 1/4, Section 12, Township 28 South, Range 4 West		
Patented?	Cliff No. 41	N.W. 1/4, Section 13, Township 28 South, Range 4 West N.E. 1/4, Section 14, Township 28 South, Range 4 West S.E. 1/4, Section 11, Township 28 South, Range 4 West S.W. 1/4, Section 12, Township 28 South, Range 4 West		
95714	Lower Contact	S.W. 1/4, Section 12, Township 28 South, Range 4 West		
95752	Slope No. 1	S.W. 1/4, Section 12, Township 28 South, Range 4 West		
95753	Slope No. 2	S.W. 1/4, Section 12, Township 28 South, Range 4 West N.W. 1/4, Section 12, Township 28 South, Range 4 West		
95701	Hidden Treasure Amended	S.W. 1/4, Section 12, Township 28 South, Range 4 West S.E. 1/4, Section 11, Township 28 South, Range 4 West		
95635	Deer Trail No. 42	S.E. 1/4, Section 12, Township 28 South, Range 4 West S.W. 1/4, Section 11, Township 28 South, Range 4 West		
95726	Mountain Chief Amended	S.W. 1/4, Section 12, Township 28 South, Range 4 West N.W. 1/4, Section 12, Township 28 South, Range 4 West		

IV. - E. STRUCTURES

All of the structures listed below have a near proximity to the PTH mine operation and are all used and needed for the proposed exploration and mining project. This need includes the power lines running from the transformer station (Refer to No. 12, below) to the "E" Raise where the lines are taken underground.

1. Cinder Block with Concrete Floor.
Change/Shower/Restroom Building - Required by OSHA
2. Tin Exterior with Concrete Floor.
Machine Shop/Parts
3. Tin Covered Shed
Covering Mine Portal
4. Tin Covered Building
Supply Storage - includes 50 gal drums of oil, and lubricants, drill machines
5. Transformer Platform
Supplies power needs to compressors and shop areas.
6. Tin Covered with Concrete Floor
Compressor Building - houses the mine compressors.
7. Tin Covered Building
Machine parts storage.
8. Wooden Structure (two rooms) with Wood Floor
Office area and drill core/sample storage.
9. Tin Covered Building with Concrete Floor
Storage of electric trammer motors and mine lights charging facility. Small parts workshop.
10. Tin Covered Shed
Contains the generator for charging motors and lights.
11. Tin and Wood Structure (heavy construction)
For security storage.
12. Transformer Station - Surrounded by High Chain Link Fence
Supplies power to the entire mine operation (Surface and Underground).
13. 10' x 40' Mobile Trailer
This facility will likely become the main mine office with telephone, mapping facilities, computer center.
14. Water Storage Tank
Supplies water for personal hygiene use and as a first effort against possible fire occurrence.

IV-E



RECLAMATION PLAN

for

DEER TRAIL MINE (PTH)

I. REMOVAL OF SURFACE STRUCTURES AND EQUIPMENT

Description:

Remove 11 buildings/structures including one trailer. Remove and dispose of the contents of the buildings. Demolish buildings and footings and haul all debris to a sanitary landfill or otherwise salvage and remove from the site. Load all other surface debris, including metal and wood material and machinery and remove from site. Excavate and remove water storage tank. Remove and dispose of chain link fence. Remove transformer substation and power line from the substation to the "E" Raise. Salvage material, equipment, and machinery when practicable.

II. SURFACE RECLAMATION - REVEGETATION

Description:

Contour and reshape the ground surface to blend in with surrounding terrain after facilities are removed. Close and recontour portals and remove access roads into PTH portal and into "E" Raise portal (from junctions with Forest Road 125). Scarify all compacted surfaces. Seed all disturbed areas (estimated at 2 acres) with Forest Service approved seed mix at 26 pounds per acre. Fertilize at 200 pounds per acre with commercial fertilizer (16:16:16).

Recommended seed mixture for Deer trail Mine site, Beaver Ranger District.

<i>Species</i>	<i>Pounds/Acre</i>
Hard Fescue (Durar)	4
Dryland Orchardgrass (Paiute)	2
Bluebonnet Wheatgrass (Whitman)	4
Crested Wheatgrass (Hycrest)	6
Annual Ryegrass	4
Alfalfa (Ladak)	2
Small Burnet (Delar)	4
Total	26

III. RECLAMATION STANDARDS

1. Upon cessation of mining activity, all buildings, metal and wood material, and machinery in the mine project area will be removed from National Forest System lands, unless specifically authorized by the Forest Service.
2. Areas no longer needed for mining operations will receive reclamation treatment as prescribed in the reclamation plan within 1 year.
3. All reclaimed areas will be graded and restored to closely resemble the general surface configuration of surrounding terrain and restored to closely resemble the general surface configuration of surrounding terrain and blend into and compliment the drainage pattern of the surrounding terrain, and be reclaimed to be capable of supporting the approved post-mining land use.
4. Seeding and planting of disturbed areas shall be conducted:
 - a) Immediately after final site preparation; and
 - b) During the first normal period for favorable planting conditions as recommended by the Forest Service.
5. Acceptable ground cover requirements for bond release will be at least 70 percent of an adjacent like area. Ground cover will include:
 - a) live perennial basal herbaceous vegetation.
 - b) accumulated dead plant litter.
 - c) rock fragments over 3/4 inch diameter.

RECLAMATION BOND WORKSHEET

for

UNICO, Inc.

DEER TRAIL MINE (PTH)

Plan No. 040803-97-1

I. EQUIPMENT AND MOBILIZATION COSTS

Description: Type and hourly rate of heavy equipment needed to accomplish reclamation. Move-in and move-out (roading) costs. Hourly operating costs were used to estimate reclamation costs in parts II and III.

	Operating Cost (per hour)	Move-in & Move-out Cost
Track-mounted Excavator (Backhoe) 1.5 cu.yd. capacity	\$ 75.00	\$ 160
Loader, wheel type, 4-wd, 2.5 cu.yd. capacity	\$ 45.00	\$ 160
Dump Truck, 12-18 cu.yd. capacity	\$ 45.00	\$ 105
	Total	\$ 425

II. REMOVAL OF SURFACE STRUCTURES AND EQUIPMENT

Description: Remove 11 buildings/structures including one trailer. Remove and dispose of the contents of the buildings. Demolish buildings and footings and haul all debris to a sanitary landfill. Load all other surface debris, including metal and wood material and machinery and haul to landfill. Excavate and remove water storage tank. Remove and dispose of chain link fence. Remove transformer substation and power line from the substation to the "E" Raise. Salvage material, equipment, and machinery when practicable.

	Unit Cost	No. of Units	Total
Buildings	\$2.75 per sq. ft	11 @ 3,900 sq. ft.	\$ 10,725
Power Line & Substation		3,000 feet	\$ 3,500
House Trailer		1	\$ 300
Chain Link Fence		370 feet	\$ 350
Water Storage Tank		1	\$ 250
Labor: demolition & load	\$14.00 per hour	40 hours	\$ 560
		Total	\$ 15,685

III. SURFACE RECLAMATION - REVEGETATION

Description: Contour and reshape the ground surface to blend in with surrounding terrain after facilities are removed. Close and recontour portals and remove access roads into PTH portal and into "E" Raise portal (from junctions with Forest Road 125). Scarify all compacted surfaces. Assumes use of track-mounted excavator at \$75 per hour to accomplish all work. Seed with Forest Service approved seed mix; fertilize.

	Unit Cost	No. of Units	Total
Contour, reshape, scarify around buildings; close portals	\$800 per acre	1.3 acres	\$ 1,040
Contour, obliterate access roads	\$2,600 per mile	0.5 miles	\$ 1,300
Seeding	Seed: 26 lbs/acre @ \$1.50/pound	2.0 acres	\$ 75
Fertilizing	Fertilizer: 200 lbs/acre @\$0.10/pound	2.0 acres	\$ 40
Labor: Seeding and fertilizing	\$14.00 per hour	6 hours	\$ 84
		Total	\$ 2,539

IV. SUMMARY

ITEM	TOTAL
Equipment Mobilization	\$ 425
Removal of Structures and Equipment	\$ 15,685
Surface Reclamation and Revegetation	\$ 2,539
Subtotal	\$ 18,649
Administrative Costs (5% of total)	\$ 932
Grand Total	\$ 19,581

BOND REQUIRED PRIOR TO PLAN APPROVAL = \$19,600
(rounded to nearest \$100)

- V The bond amount may be periodically reviewed and adjusted to compensate for completed reclamation work, change in equipment rental rates, wage rate scale, or increased scope of the operation. Should collection of the bond be required, actual cost and methods may be different than those described. If actual costs are greater than the amount of the bond, the Forest Service may request compensation. If the bond amount is greater than the reclamation work performed, a refund will be given.

WORKSHEET PREPARED BY:

Richard R. Kennedy

DATE 3/5/97

REVIEWED BY:

Doyle R. F. Janiga

DATE 3/24/97

Notes:

1 References Used.

- Cost Estimating Guide for Road Construction, Region 4 Division of Engineering, Forest Service, 1995.
- Heavy equipment cost provided by local operator.
- Estimated cost for removal of power line and transformer substation provided by Utah Power and Light, Richfield, Utah.